

**From:** [Boggs Daniel](#)  
**To:** [Boggs Daniel](#)  
**Subject:** FW: Parker Question Regarding Flexible Fuel Hose and Fitting, ERA18FA138  
**Date:** Tuesday, December 11, 2018 3:29:48 PM

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**From:** Jeremy Katt [REDACTED]  
**Sent:** Wednesday, June 6, 2018 11:33 AM  
**To:** Monville Timothy [REDACTED]  
**Cc:** Boggs Daniel [REDACTED]  
**Subject:** Re: Parker Question Regarding Flexible Fuel Hose and Fitting, ERA18FA138

Hi Tim,

See our blue text response below. This hose is from our industrial Hose Products division near Cleveland. Let me know of any additional questions and if you want us to take a look at the hose.

Thanks,

Jeremy Katt  
Air Safety Officer  
Parker Hannifin Corporation  
Parker Aerospace  
[REDACTED]  
[REDACTED]

**From:** Monville Timothy [REDACTED]  
**To:** "[jkatt](#)" [REDACTED]  
**Cc:** Monville Timothy [REDACTED], Boggs Daniel [REDACTED]  
**Date:** 06/04/2018 01:00 PM  
**Subject:** Parker Question Regarding Flexible Fuel Hose and Fitting, ERA18FA138

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Jeremy, good afternoon. I am assisting Dan Boggs of examination and testing of an engine-driven fuel pump from a Lycoming IO-540-K1A5, that was installed on a Piper PA-32-300, N4153R, that crashed on May 2, 2018, near West Milford, NJ.

The engine-driven fuel pump has a flexible hose attached to the outlet that is marked with "Parker Tough Cover 451TC-6W" with a portion of the "W" obscured by the ferrule/sleeve. The ferrule/sleeve of the hose was marked with "P43-6-R1-R2-R3" and "10643-6-6", while the fitting at the opposite end of the hose was bent, and also marked with "10643-6-6", and P43-6-R1-R2-R3.

The W obscured by the fitting shell is the beginning of the abbreviation WP which stands for Working Pressure. The hose does not appear long enough to have the date code as it does not appear to be visible.

I have attached a picture showing the marking 10643-6-6.

In looking at your web site for that P/N it depicts/shows a different fitting. Can you help me understand/determine what fitting is actually installed? I also need to determine if the fitting in picture 8956 which is bent is supposed to be bent.

Are there any other markings on the fittings/sleeves besides a patent # that will help you? What does the numbers P43-6-R1-R2-R3 mean?

The fitting is correct for the hose and is a 43 series fitting with the R1, R2 and R3 meaning it can be used on SAE 100R1, 100R2, and 100R3 style hose. There are other hose styles it can be used with as well, 451TC is a 100R17 hose that is approved with this fitting. These markings are all standard for the 43 series part. It is hard to say for certain, but it appears the fitting should have originally been straight and has been bent.

We can take a look at this hose for you at our Hose Products Division near Cleveland as we would be able to determine better if the fitting was bent and also our experts may be able to determine other features by examining closely. We would check to see if the fittings were put on correctly and that there are no internal restrictions by improper fitting installation etc. You could return the hose to our local Cleveland FSDO and we would be glad to examine and write a report if needed. Just let me know what you want to do.

Picture 8942 depicts the fitting at the engine-driven fuel pump outlet.

Finally, is this hose and fittings suitable for a certificated aircraft?

No, this is for industrial use only and is not approved for aircraft use. We have aviation hoses from our Stratoflex division that support aerospace applications.

v/r,  
Tim Monville

Timothy W. Monville  
Sr. Air Safety Investigator  
National Transportation Safety Board  
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